

## ABSTRACT

In order to achieve a higher level of efficiency and greater output without complicating the manufacturing process or increasing production costs, an electromagnetic motor according to the present invention adopts a  $\Delta$  connection structure, which includes a u-phase coil winding unit, a v-phase coil winding unit and a w-phase coil winding unit radially extending from a stator fixed to a rotating shaft and set with a phase difference relative to one another and a first feeding terminal, a second feeding terminal and a third feeding terminal through which a predetermined current is supplied to coils at the individual phases. The electromagnetic motor is characterized in that coils are wound at least twice over through a sequence; the first feeding terminal  $\rightarrow$  the u-phase coil winding unit  $\rightarrow$  the second feeding terminal  $\rightarrow$  the v-phase coil winding unit  $\rightarrow$  the third feeding terminal  $\rightarrow$  the w-phase, winding unit, so as to form at least two coil layers at each coil winding unit among the u-phase coil winding unit, the v-phase coil winding unit and the w-phase coil winding unit.